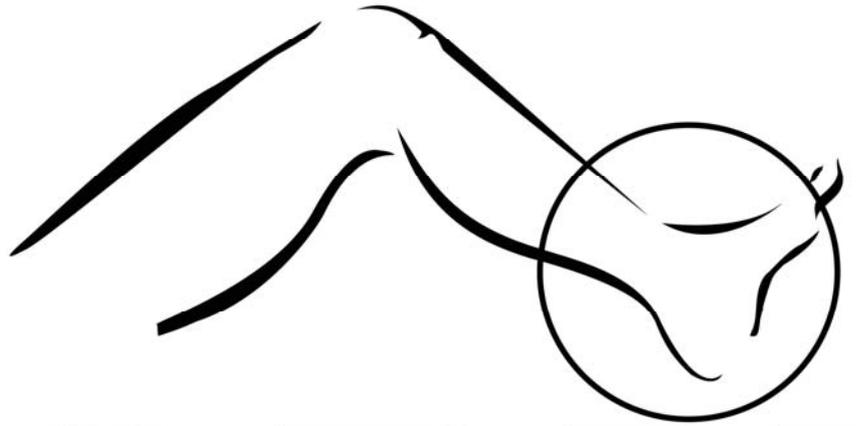


The



CPM

concept



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SAFETY RECOMMENDATIONS

- The physician defines the protocol and ensures that it is correctly implemented (adjustments, session time and frequency of use).
- We recommend that you lock the hand control when you give it to the patient.
- For optimum safety, always give the hand control to the patient before starting the system.
- Explosion hazard: KINETEC Breva is not designed for use in the presence of flammable anesthetics.
- Check that the electrical socket is in good condition and is suitable for the splint power supply cord. The latter complies with current standards and has a grounding socket. The plug may be connected to any standard socket. The socket must however have a grounded pin. To connect the power supply, only use the original cable supplied with the machine. Check that the cables remain free around the device so that they do not get damaged.

Manuel N°467896290 - Update 13/12/05

Definition

The KINETEC Breva is used in a chair or in a bed for passive mobilization of the ankle and rear foot, and allows the following movements:

- Plantar Flexion / Dorsiflexion
- Eversion / Inversion

• Indications

Passive mobilization of the following fractures after internal fixation:

- malleolar fractures,
- tibial pilon fractures,
- talar fractures,
- calcaneal fractures.

Mobilisation of the joints of the foot after operative or conservative treatment of lesions of the:

- Achilles tendon,
- lateral collateral ligament,
- medial collateral ligament.

Surgical lengthening of the Achilles tendon for post-traumatic stiffness.

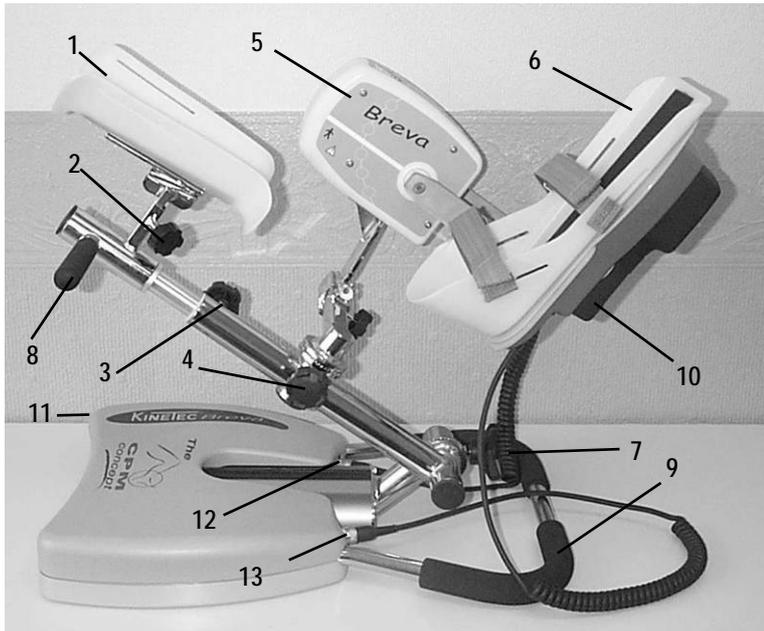
• Clinical Benefits

- Breaks the cycle of trauma, inflammation and the loss of range of motion.
- Prevents joint stiffness.
- Speeds the recovery of post-operative range of motion.
- Stimulation of the venous circulation of the lower leg.
- Maintains the quality of the joint surface.
- Reduces pain and edema.
- Promotes joint cartilage healing.
- Reduces hospitalization time
- Reduces the need for pain medication.
- Provides immediate post-operative continuous passive motion.
- Digital ROM readout on the patient hand control for positive reinforcement.
- Maintains desired positions for stretching and muscular rest

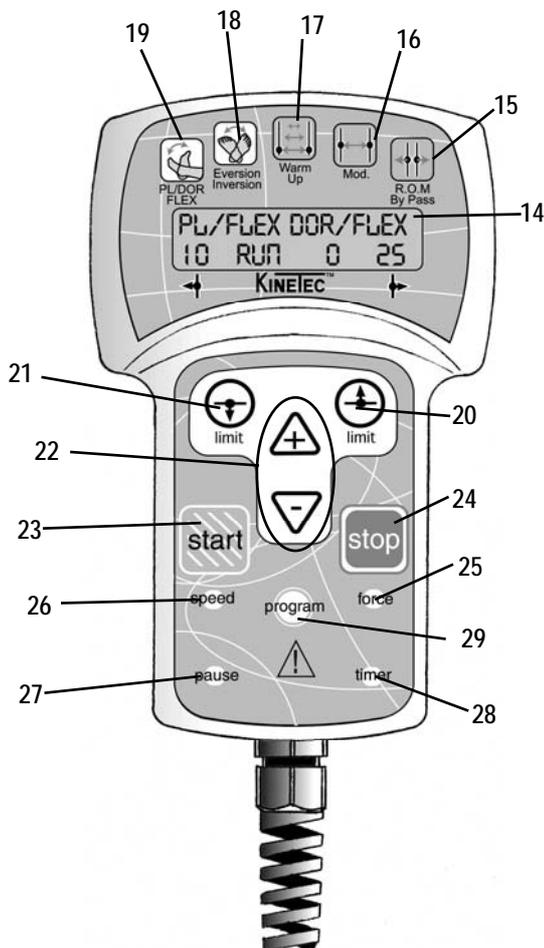
• Contraindications

Bone Cancer, Warped joint surfaces, Spastic paralyses, Unstable fractures, Uncontrolled infection.

The KINETEC Breva is a portable machine, single unit device that can be used in a chair or in a bed. It consists of the following components:



- 1 • Calf support
- 2 • Calf support setting lock
- 3 • Lower limb setting lock
- 4 • Motor position setting lock
- 5 • Motor
- 6 • Foot support
- 7 • Bed or chair position setting lock
- 8 • Position handle
- 9 • Transport handle
- 10 • Hand control
- 11 • ON/OFF switch
- 12 • Motor connector
- 13 • Hand control connector



- 14 • Liquid-crystal display (2 lines of 16 characters)
- 15 • BYPASS mode key
- 16 • MODULATION key
- 17 • WARM UP key
- 18 • Eversion / Inversion key
- 19 • Extension/Flexion key
- 20 • Upper limits setting
- 21 • Lower limits setting
- 22 • Increase / decrease keys.
- 23 • START key
- 24 • STOP key
- 25 • FORCE key
- 26 • SPEED key
- 27 • PAUSE key
- 28 • TIMER key
- 29 • PROGRAM access key

Safety

The physician defines the protocol and ensures that it is correctly implemented (adjustments, session duration and frequency of use).
The first cycle of the movement need to be done without the patient.
The patient must know the start/stop/reverse function on the control handle. Hand control must be accessible to patient at all times. (See page 5).
KINETEC Brevia complies with Directive 93/42/CEE.

EXPLOSION HAZARD:
KINETEC Brevia is not designed for use in the presence of flammable anesthetics.

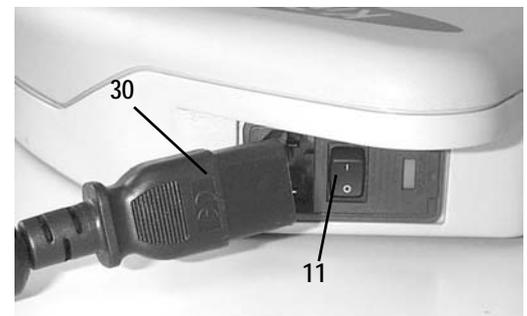
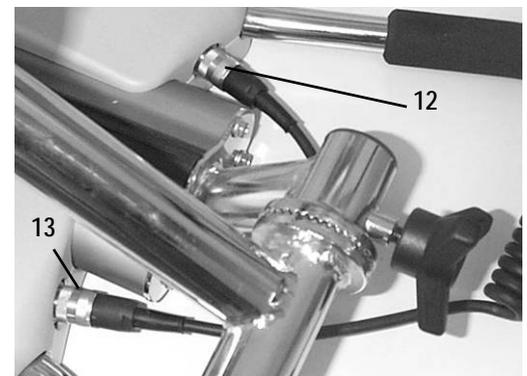
In case of electromagnetic interference with other devices move the device.
KINETEC Brevia is in compliance with standards in force (IEC 60601-1-2:2001), electromagnetic compatibility standard for medical devices.
Please, do not touch the moving parts while the unit is running, pinching risk.

Electrical Connection

KINETEC Brevia is a type B class I device.
Before connecting the device to the power supply, check that the mains voltage matches that shown on the identification plate (100-240 V~ 50-60Hz).
Connect the hand control (13) and the motor (12).
Connect the power supply cable (30).

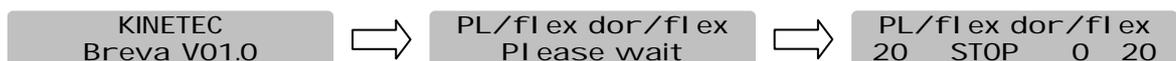
IMPORTANT

Check that the electrical socket is in good condition and is suitable for the splint power supply cord. The latter complies with current standards and has a grounding socket. The plug may be connected to any standard socket. The socket must however have a grounded pin.
To connect the power supply, only use the original cable supplied with the machine.
Check that the cables remain free around the device so that they do not get damaged.



Starting the unit

Switch on (11).
While the unit begins an auto diagnostic, the display shows the following



Your KINETEC Brevia is ready to be used.

Comment: The values of the movements are record when the machine is switched on/off (except Timer and Warm Up mode).

Select your language

Beginning	Keys to press	Display	Remarks
Switch the unit ON		KINETEC BREVA V01.0	
		PL/FLEX DOR/FLEX Please wait	
		PL/FLEX DOR/FLEX 20 STOP 0 20	
Press the 2 keys in the same time	 	Language: english	The display indicate the language selected.
To change the language	 or 	Language: french	The English language is selected. English French German Italian Spanish
To validate the new language.		Ok Switch on/off	To exit and confirm the new language, switch OFF and Switch ON the unit.

Locking the hand control setting

The hand control allows the patient to control the machine as appropriate.



Simultaneously press the  and  keys to lock the hand control,

The display reads "LOCK", you can not change the parameters, if you try the display reads "LOCK".

To unlock the hand control, simultaneously press the  and  keys, the display reads "UNLOCK".

We recommend that you lock the hand control when you give it to the patient.

Comment: The hand control is unlocked when you switch the unit ON/OFF.

START/STOP/REVERSE function

As with all KINETEC systems, KINETEC Brevia is equipped with a START/STOP/REVERSE function.

When the unit is running, the display reads RUN

Press the  key of the hand control. The movement stops. The display reads STOP.

Press the  key of the hand control. The movement starts in the opposite direction and the display reads RUN.

Caution:
For optimum safety, always give the hand control to the patient before starting the system.

Use of the hand control

Quick Start

Set up the patient and proceed as below:

Beginning	Keys to press	Display	Remarks
Switch the unit ON		KINETEC BREVA V01.0	The display indicates the last movement selected.
		PL/FLEX DOR/FLEX Please wait	
		PL/FLEX DOR/FLEX 20 STOP 0 20	
To select the Inversion/Eversion movement	Or   	Inversion/Evers. Right :+ Left :-	The display shows the movement selected and then to choose the foot side (+ for right or - for left).
		EV RIGHT INV 10 stop 0 10	
		INV LEFT EV 10 stop 0 10	
To select the Extension/Flexion movement		PL/FLEX pI /FLEX 20 STOP 0 0	The display shows the movement with the default settings.
Start the session with the original parameters of the movement (default setting).		PL/FLEX  20 RUN 3 0	The value change at the speed of the movement.

Possible values for each parameter

	 Extension/Flexion	 Inversion/Eversion
• Lower limit	Plantar Flexion 40° Dorsiflexion 25°	Right Foot: 25° to 20° Left Foot: 25° to 20°
• Upper limit	Plantar Flexion 35° Dorsiflexion 30°	Right Foot: 20° to 25° Left Foot: 20° to 25°
• Speed	1 to 5 (from 50 to 150° per minute)	
• Load	1 to 6	
• Upper Pause	0 to 900 seconds (15 minutes)	
• Lower Pause	0 to 900 seconds (15 minutes)	
• Timer	No timer (00H00) to 24H00	

Default setting values for each parameter

	 Extension/Flexion	 Inversion/Eversion
• Lower limit	Plantar flexion 20°	10° of Inversion or Eversion according the foot
• Upper limit	Dorsiflexion 0°	10° of Eversion or Inversion according the foot
• Speed	2	
• Load	6	
• Upper Pause	0	
• Lower Pause	0	
• Timer	No timer (00H00)	

How to adjust the basic parameters of the movement?

Beginning	Keys to press	Display	Remarks
To stop the unit		PL/FLEX PL/FLEX 20 STOP 5 0	Check if the hand control is not locked (See page 5).
To select the Inversion/Eversion movement	Or   	Inversion/Evers. Right :+ Left :-	The display shows the movement selected and then to choose the foot side (+ for right or - for left).
		EV RIGHT INV 10 stop 5 10	
		INV LEFT EV 10 stop 5 10	
To select the Extension/Flexion movement		PL/FLEX pI /FLEX 20 STOP 5 0	The display shows the movement with the default settings.
To display the upper or lower limit of the movement	Or  	PL/FLEX pI /FLEX 20 PL 5 0	The value blinks.
		PL/FLEX pI /FLEX 20 Dor 5 0	
To change the limit if necessary	 Or 	PL/FLEX DOR/FLEX 20 Dor 5 15	The new value blinks.
To validate the new value, press another key or wait more than 3 seconds.		PL/FLEX DOR/FLEX SPEED 2	While the value blinks press the (+) or (-) key to change if necessary.
		PL/FLEX DOR/FLEX Load ____	
		PL/FLEX DOR/FLEX Timer disabl e	
Or Or to display pause in extension or flexion limit		PL/FLEX DOR/FLEX PAUSE DOR OS	Successive presses on this key selects the pause at the extension or flexion limit.
		PL/FLEX DOR/FLEX PAUSE PL OS	
To change the pause if necessary	 Or 	PL/FLEX DOR/FLEX PAUSE PL 15S	The new pause value blinks.
To validate the new value press another key or wait more than 3 seconds. The display shows the selected mode		PL/FLEX pI /FLEX 20 stop 5 15	The unit is ready to start with the new parameters.

Comments:

- The values shown in the 'Display' column are examples.

How to modify programs PROGRAM MODE ?

Beginning	Keys to press	Display	Remarks
To switch off the unit			
Press the two keys at the same time and switch the unit ON	 	KINETEC BREVA V01.0	Welcome text during 3 seconds
Then		Program 1 EMPTY	The program number blinks.
To change the program if necessary	 Or 	Program 10 EMPTY	The new program number blinks.
To choose the movement		RIGHT PROG NR10 10 INV/eve 10	The display shows the new movement selected. After the selection of the movement press the Warm Up key to validate it.
		Left PROG NR10 10 INV/eve 10	
		Program 10 20 pl/dor 0	
To display the extension or flexion limit of the movement	Or  	Program 10 20 pl/dor 0	The value blinks.
		Program 10 20 pl/dor 0	
To change the limit of movement if necessary	 Or 	Program 10 20 pl/dor 20	The new value blinks.
To validate the new value, press another key or wait more than 3 seconds		Program 10 Speed : 1	While the value blinks press the (+) or (-) key to change if necessary.
		Program 10 Load : _____	
		Program 10 Timer disable	
		Program 10 Pause pl 0s	
To record the program 10		Program 10 Save :+ clear :-	
Then		Program 10 Saving	The program 10 has been recorded and the display indicates the next program so you can change another program.
		Program 11 EMPTY	
OR To cancel the program		Program 10 CLEARING	The program 10 has been cancelled and the display indicates the next program so you can change another program.
		Program 11 EMPTY	
To exit program mode, switch OFF and switch ON the unit.		KINETEC BREVA V01.0	To use the modified program see page 10.

Comments:

- The values shown in the 'Display' column are examples.

Comments:

- When a program has been deleted, the display shows

Program 11
EMPTY

Program table

• Program number	Movement type	Lower limit	Upper limit	Speed	Load	Pause on upper limit	Pause on lower limit	Timer
1	  							
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Using Programs



The KINETEC Breva allows you to store up to 16 programs, including the type of movement, ROM, speed, load, pauses and timer.

The original parameter values of the program are empty.

These values can be modified and recorded at any time (see 'How to enter a program' page 8)

Beginning	Keys to press	Display	Remarks
To Stop the Unit		PL/FLEX dor/FLEX 20 STOP 5 20	Check if the hand control is not locked (See page 5).
To access the program mode		PROGRAM 1 empty	The program number blinks.
To change the program if necessary	or	PROGRAM 10 20 PL/dor 0	The new program number blinks.
To exit and validate the selected program		PI/flex pl/flex 20 stop 5 0	The current parameters have been recorded in program 3.
To exit without validation of selected program		PL/FLEX dor/FLEX 20 STOP 5 20	Back to the starting parameters.
Start the unit		PI/flex pl/flex 20 stop 10 0	The value change at the speed of the movement.

Reading the values of a program: example SPEED

Beginning	Keys to press	Display	Remarks
To Stop the Unit		PI/flex pl/flex 20 stop 10 0	Check if the hand control is not locked (See page 5).
To access the program mode		PROGRAM 1 empty	The program number blinks.
To change the program if necessary	or	PROGRAM 10 20 PL/dor 0	To change the program if necessary.
To read the speed value		PROGRAM 10 Speed : 1	Displays the speed value.
After 5 seconds or after pressing on another key		PI/flex pl/flex 20 stop 10 0	
To exit and validate the selected program		PI/flex pl/flex 20 stop 10 0	The current parameters have been recorded in program 3.
Start the unit		PI/flex pl/flex 20 stop 10 0	The value change at the speed of the movement.

Comments:

- The values shown in the 'Display' column are examples. They actually depend on the stored programs.
- The current movement parameters can be changed while using that program but no data will be stored in the original program. See the programming mode (p 8) to modify programs.



How to use the WARM UP key ?

Beginning	Keys to press	Display	Remarks
To stop the unit		PI /fl ex DOR/fl ex 20 stop 10 5	Check if the hand control is not locked (See page 5).
To select the Extension/Flexion movement		PI /fl ex DOR/fl ex 20 stop 10 5	
To select the Warm Up mode		PI /DOR FLX W.UP 20 STOP 10 5	
Or To select the Inversion/Eversion movement		INVERSION/evers. Right :+ Left :-	To change the movement value if necessary see page 7.
To select the right or left foot		Ev right inv 10 stop 10 10	
To select the Warm Up mode		Ev wup right inv 10 stop 10 10	
Start the movement		Ev wup right inv 10 RUN 10 10	The value change at the speed of the movement.

Warm Up rules:

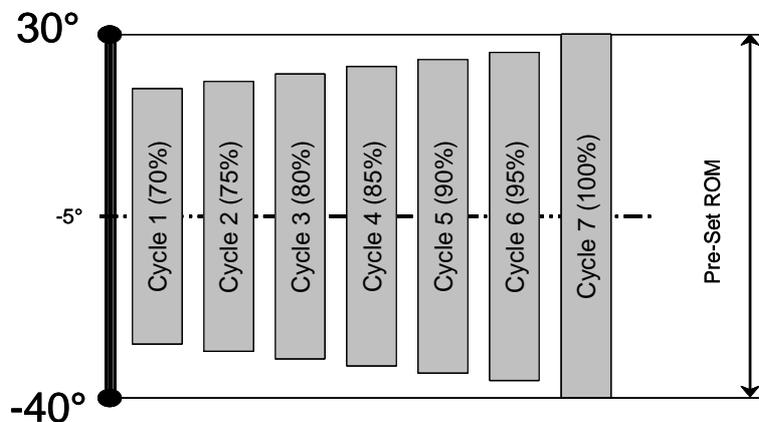
The Kinetec Breva starts at 70% of the full ROM, increasing 5% of the range every other cycle until the pre-set ROM is reached.

Comments:

- The parameters modification should always be done while the unit is stopped.
- Pauses and By-Pass mode are not available during warm up cycles.
- The Warm Up cycles are only working when the movement is firstly run.
- To start new Warm Up sessions press twice the « Warm Up » key.
- The calculation mode used enables reaching the pre-set ROM in approximately seven full cycles.

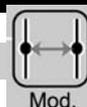
Example:

For a Warm Up treatment with a pre-set ROM from 40° to 30°.
The first cycle starts from 32° to 22° and increase 5% each cycle



Use of the hand control

How to define the patient tolerance • At the start of a session



This function, MODULATION Mode is a way to set within the tolerance of a patient at the beginning of a session.

Set up the patient and proceed as below:

Beginning	Keys to press	Display	Remarks
Switch the unit ON		KINETEC BREVA VO1.0	
		PL/FLEX DOR/FLEX Please wait	
		PL/FLEX DOR/FLEX 20 STOP 18 20	
To choose the movement		EV RIGHT INV 10 STOP 18 18	The display shows the new movement selected.
		PL/FLEX DOR/FLEX 20 STOP 18 20	
To select the MODULATION Mode		MODUL. : use +or- 20 STOP 18 20	The display indicates the keys to be used to drive the machine, this message is displayed 3 seconds.
To select the pain level (key + for flexion, Key - for extension)	Or Continuous press	MODUL. : use +or- 20 manual 28 28	The unit is moving to the selected way. It is waiting for you to select new limits.
To set the pain level when reached, immediately press	Or limit limit	MODUL. : use +or- 20 manual 28 28	The new limit of the movement is recorded.
To start the session with the new movement limits		PL/FLEX DOR/FLEX 20 RUN 15 28	The angle display changes with current movement.

Comment: arrived at the limit max of the movement the angle max is automatically recorded and exit of the function.

How to define the patient tolerance • During the session



This function, The BY-PASS MODE is a way to address the pain threshold of a patient during a session.

IMPORTANT: Can be used only when the machine RUN.

Beginning	Keys to press	Display	Remarks
The unit is running		PL/FLEX DOR/FLEX 20 RUN 15 28	Check if the hand control is not blocked (See page 7).
To select the BYPASS mode		BYPASS : USE +or- 20 RUN 20 28	The display indicates the keys used to run the machine. This message is displayed 3 seconds.
To select the new discomfort level	Or Continuous press	BYPASS : USE +or- 20BYPASS 30 28	The unit is moving to the selected way. It is waiting for you to select new limits.
To select the new discomfort level when reached, immediately press	Or limit limit	BYPASS : USE +or- 30BYPASS 30 28	The new limit of the movement is recorded.
Continue the session with the new movement limits		PL/FLEX DOR/FLEX 30 RUN 17 28	The angle display changes with current movement.

Comment: arrived at the limit max of the movement the angle max is automatically recorded and exit of the function.

The KINETEC Patient Pad Kit is designed for rapid fitting, optimal hygiene and maximum patient comfort.

FOR OPTIMAL HYGIENE, A NEW SET OF PADS SHOULD BE USED FOR EACH PATIENT.

CLEANING:

- Disinfecting of the pads: Washing at 30°C with use of a disinfecting solution during the rising cycle.

Adult slipper



Pediatrics slipper



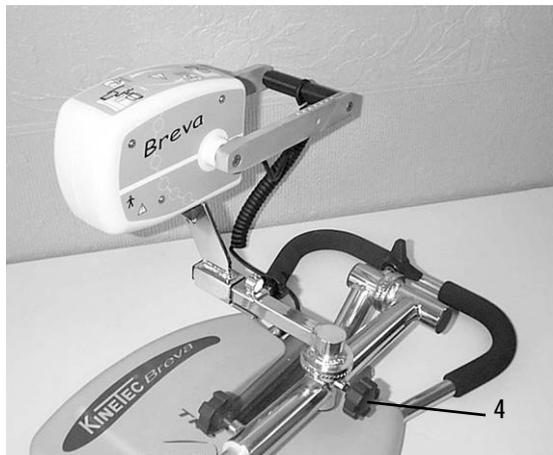
Pads for calf support.



Extension / Flexion



The KINETEC Brevia provides a motion from 40° of plantar flexion to 30° of dorsiflexion.



Loosen the button (4).
Position the motor as shown above.
Tighten the button (4).



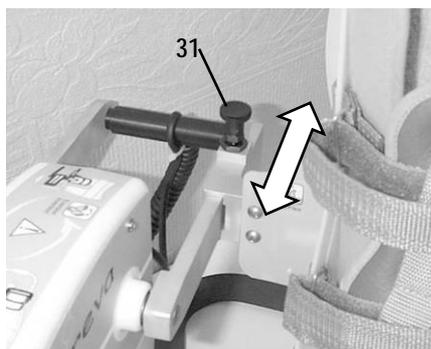
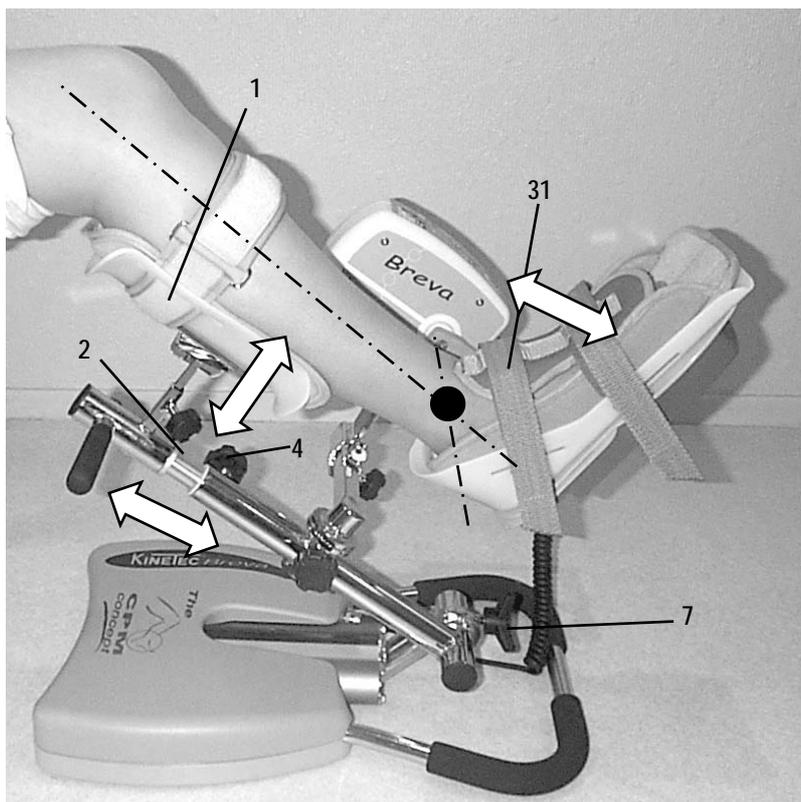
Position the Extension/Flexion footplate as shown.
The Extension/Flexion Icon label indicates the correct one.

Setting up the patient.

Adjust the slope of the splint with the button (7), choose the right position, on the bed or on the chair.

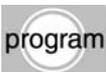
Adjust the calf support position (1) with the knobs (2) and (4).
The calf support slope is free.

The knob (31) allows the adjustment of the depth of the foot.



• Choice of the Extension/Flexion movement:

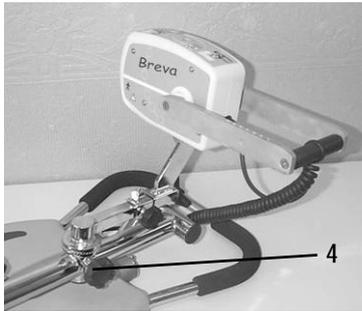
- Press  and adjust your parameters (see page 7).

- Or select a program  (see page 10).

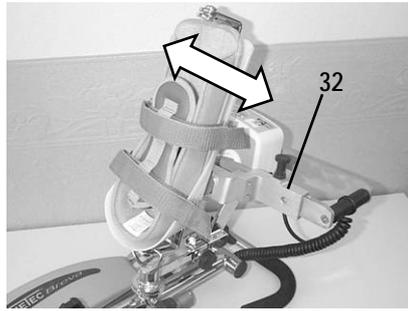


Eversion / Inversion

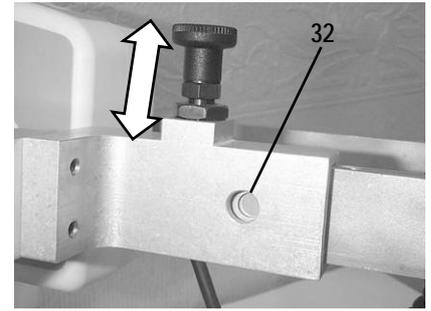
The KINETEC Brevia provides a motion from 25° of Eversion to 25° of Inversion.



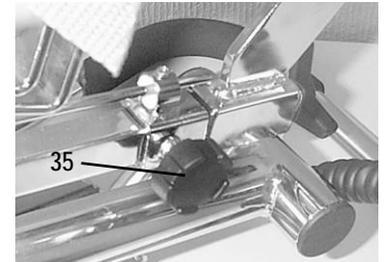
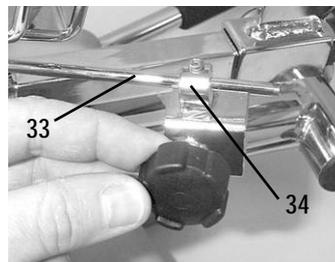
Loosen the button (4).
Position the motor as shown above.
Tighten the button (4).



Position the Eversion/Inversion footplate as shown.
The Eversion/Inversion Icon label indicates the correct one.
The correct position is indicated by the green indicator (32).



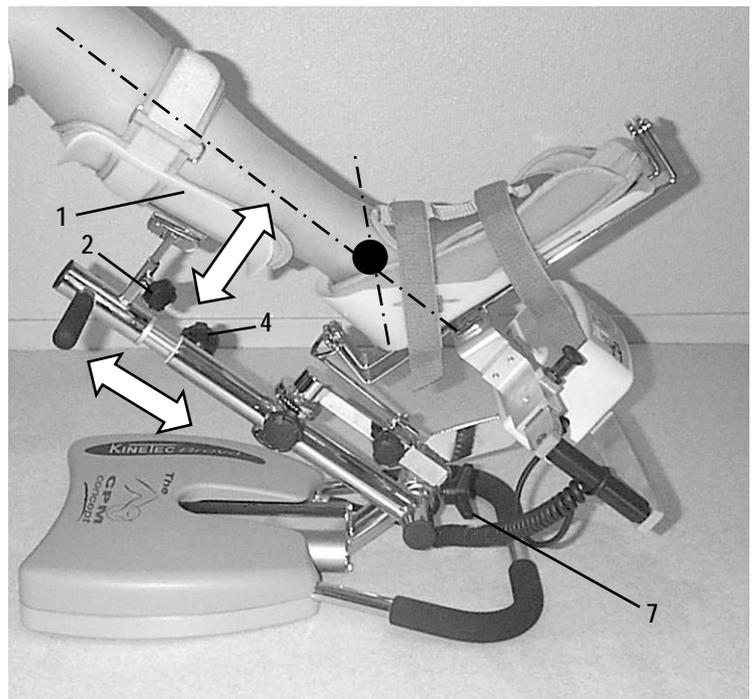
Position the synchronization bar (33) in its guide (34)
and tighten the knob (35) into the threaded hole on the
shaft.



Setting up the patient.

Adjust the slope of the splint with the button (7),
choose the right position, on the bed or on the
chair.

Adjust the calf support position (1) with the
knobs (2) and (4).
The calf support slope is free.



• Choice of the Eversion/Inversion movement:

- Press  and adjust your parameters (see page 7).

- Or select a program  (see page 10).

Product information

Maintenance

After 2,000 hours of operation, KINETEC Brevia requires a few lubrication and maintenance operations (lubrication of the joints, pointer stops and ball screws).

The need for maintenance is indicated by display of the message SERV. MOTOR when the system is switched on.

Despite that warning, you can continue to use your KINETEC Brevia by pressing START, but you should contact your nearest KINETEC technician to have the maintenance operations conducted as soon as possible.

- A motor running time counter is available. Simultaneously press keys  and , the displays shows

RESET TIME 924H
Reset: Limit Low

this counter can be resetting by pressing the key



Cleaning

Before conducting any cleaning operation, SWITCH the unit OFF and disconnect the power supply.

Use a DISINFECTANT (PROPANOL/ISOPROPANOL or ALDEHYDE-based solution). Spray the disinfectant on the SURFACES (plastic shells and metal components).

In order to ensure optimal hygiene, you are advised to clean the covers for each new patient. All the consumables enable hazard-free disposal.

Technical specifications

Product:
Weight: 12,5kg (27.5 lb.)
Unit dimensions:
Length 56cm (22 in.),
width 37cm (15.5 in.),
height 45cm (17.7 in.)
Angular limits: see page 6
Speed: from 50° to 150°/min
Foot sizing:
from 19cm (7.5in.) to 29cm (11.4in.)

Electrical:
Power supply: 100-240 V~
Frequency: 50-60 Hz
Power consumption: 50 VA
Device of type B class I
IP 20.
Fuse T 750mA 250V 6.3x32mm
(KINETEC order: 4610007434)

Environment
- Storage/transport conditions:
Temperature: -40 to 160°F / -40 to 70°C
Relative humidity: up to 90%
- Operating conditions:
Room temperature: 50 to 105°F / 10 to 40°C
Relative humidity: up to 80%

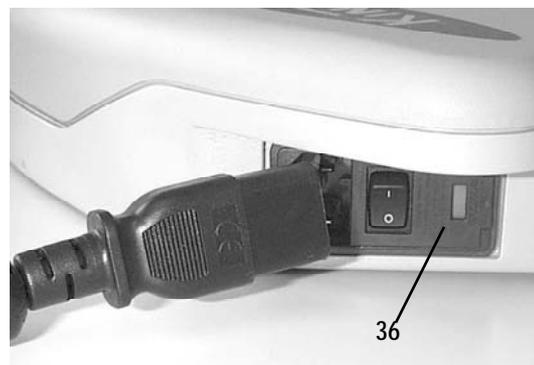
Troubleshooting

A spare parts list and technical catalog are available to you on request from your KINETEC distributor.

If, after connecting the power supply cable to the power supply and switching on KINETEC Brevia:

- The display does not indicate any information:
 - Check that the electrical socket is live using another device.
 - Check if the remote control is well connected.
 - Replace the fuse(s) (36) of the connector with fuses of the same type and caliber: 2 fuses T 750 mA 250V (6.3 x 32) (KINETEC order: 4610007434).
 - If the display still does not indicate any information, contact your nearest KINETEC technician.
- Your KINETEC Brevia does not work and the display indicates 50 STOP 25 115, Press START again.
Your KINETEC Brevia still does not function: Contact your nearest KINETEC technician.
- Your KINETEC Brevia does not function and the display indicates:
 - SERVICE D1: angle measurement function failure,
 - or SERVICE D2: no movement,
 - or SERVICE D3: abnormal consumption,
 - or SERVICE D4: motor connection failure,

Contact your nearest KINETEC technician if the same message is displayed after having witted the device off, then on, and started it by pressing START.



Symbols used

	TYPE B device (protection against electric shocks)
	Caution (consult the accompanying documents)
	STOP (power off)
	ON (power on)
	Start movement
	Stop movement
	Program access

	Speed
	Timer
	Force
	Pause
	Increase
	Decrease
	Lower limit

	Upper limit
	Warm up
	Modulation
	ByPass
	Extension/Flexion movement
	Eversion/Inversion movement
	Alternative current

Warranty

The KINETEC warranty is strictly limited to the replacement free of charge or repair in the plant of the component or components found to be defective.

KINETEC guarantees its continuous passive motion systems for 2 years against all defects of manufacture from the date of purchase by the consumer.

KINETEC is the only organization able to assess the application of the warranty to its systems.

The warranty will be considered null and void if the device has been used abnormally or under conditions of use other than those indicated in the user's manual.

The warranty will also be considered null and void in the event of deterioration or an accident due to negligence, inappropriate surveillance or inappropriate maintenance, or due to transformation of the equipment or an attempt to repair the equipment.

Guidance and manufacturer's declaration
Electromagnetic emissions

The « KINETEC Breva » is intended for use in the electromagnetic environment specified below. The customer or the user of the « KINETEC Breva » should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment – guidance
Radio-Frequency emissions CISPR 11	Group 1	The « KINETEC Breva » uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
Radio-Frequency emissions CISPR 11	Class B	The « KINETEC Breva » is suitable for use in all establishments including domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / Flicker emissions IEC 61000-3-3	Complies	

Electromagnetic immunity

The « KINETEC Breva » is intended for use in the electromagnetic environment specified below. The customer or the user of the « KINETEC Breva » should assure that it is used in such an environment.			
Immunity test	IEC 60601 Test level	Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±2 kV, ±4 kV, ±6 kV contact	±2 kV, ±4 kV, ±6 kV contact	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
	±2 kV, ±4 kV, ±8 kV air	±2 kV, ±4 kV, ±8 kV air	
Electrical fast transient / burst IEC 61000-4-4	±2 kV for power supply lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
	±1 kV for input/output lines	±1 kV for input/output lines	
Surge IEC 61000-4-5	±0,5 kV, ±1 kV differential mode	±0,5 kV, ±1 kV differential mode	Mains power quality should be that of a typical commercial or hospital environment.
	±0,5 kV, ±1 kV, ±2 kV common mode	±0,5 kV, ±1 kV, ±2 kV common mode	
Voltage interruptions CEI 61000-4-11	< 5% U_T (>95% dip in U_T) for 5 seconds	< 5% U_T (>95% dip in U_T) for 5 seconds	At the interruption, there is a reset of the « KINETEC Breva ». After turning on, check up the operating parameters, then push START to begin the session.
	< 5% U_T (>95% dip in U_T) for 0,5 cycle	< 5% U_T (>95% dip in U_T) for 0,5 cycle	
Voltage dips and voltage variations on power supply input lines CEI 61000-4-11	40% U_T (60% dip in U_T) for 5 cycles	40% U_T (60% dip in U_T) for 5 cycles	Mains power quality should be that of a typical commercial or hospital environment.
	70% U_T (30% dip in U_T) for 25 cycles	70% U_T (30% dip in U_T) for 25 cycles	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3A/m	3A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE : U_T is the a.c. mains voltage prior to application of the test level.

Serial number: _____

Purchasing date: _____

Date: _____ Operations done: _____

Technician: _____

Running time (see page 16): _____

Exchange parts: _____

Date: _____ Operations done: _____

Technician: _____

Running time (see page 16): _____

Exchange parts: _____

Date: _____ Operations done: _____

Technician: _____

Running time (see page 16): _____

Exchange parts: _____
